UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,289	08/01/2005	Sasa Desic	P14895-US1	8982

27045 7590 12/26/2007
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024

EXAMINER
NOONAN, WILLOW W

ART UNIT	PAPER NUMBER
2146	

MAIL DATE	DELIVERY MODE
12/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/519,289	DESIC ET AL.
	Examiner	Art Unit	
	Willow Noonan	2146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>28-54</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>28-54</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>27 December 2004</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All   b) ☐ Some * c) ☐ None of:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____.

       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>See Continuation Sheet</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :12/27/2004, 5/23/2006,11/13/2007.

DETAILED ACTION

1.   The instant application having Application No. 10/519,289 has a total of 27

claims pending in the application; there are 3 independent claims and 24 dependent

claims, all of which are ready for examination by the examiner.

Oath/Declaration

2.   The applicant's oath/declaration has been reviewed by the examiner and is found

to conform to the requirements prescribed in 37 C.F.R. 1.63.

Drawings

3.   The applicant's drawings submitted are acceptable for examination purposes.

Information Disclosure Statement

4.   As required by M.P.E.P. 609(C), the applicant's submissions of the Information

Disclosure Statements dated December 27, 2004, May 23, 2006 and November 13,

2007 are acknowledged by the examiner and the cited references have been

considered in the examination of the claims now pending. As required by M.P.E.P 609

C(2), a copy of the PTOL-1449 initialed and dated by the examiner is attached to the

instant office action.

Claim Objections

5.   Claims 30 and 42 are objected to because of the following informalities: the

phrase "as said load balancing..." is grammatically incorrect. Appropriate correction is

required.

Claim Rejections - 35 USC § 112

6.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

7.   Claims 47 and 48 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claims 47 and 48 recite the limitation "said network management processor."

There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims 28-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Vaughan (*Static performance of a divide-and-conquer information-distribution protocol*

supporting a load-balancing scheme) in view of Walsh (U.S. Patent No. 6,233,601) and

Applicant's admitted prior art.

        Regarding claims 28, 40, 41, and 47, Vaughan teaches a method for managing

the respective processing loads of a plurality of processors in a processor network.

Vaughn teaches a first network management processor issuing a processing load

information collection message to an adjacent processor. *See* Vaughan at p. 431, col.

2, paragraph 4 ("the token begins its circulation at a predetermined processor").

Vaughan teaches that adjacent processors add into the message their analyzed

processing load information and forward the message around the ring. *See* Vaughan at

p. 431, col. 1, paragraph 3 ("each virtual rink is traversed by its own token whose

purpose is to accumulate and disseminate information within the ring"). Vaughan

teaches that the token returns to the first network management processor, which

determines, on the basis of the processing load information of the processors stored in

said processing load information collection message, a load balancing technique for

load distribution among the processors in said processor network. *See* Vaughan at p.

431, col. 2, paragraph 5 ("after the token completes a circuit, a preliminary decision can

be made as to the identity of the maximally loaded and minimally loaded processors ...

[for use in making] job transfer [decisions]").

        . Vaughan does not teach that the token passed around the ring may constitute a

load balancing *program* containing executable code. However, Walsh teaches that it is

well known to pass a mobile agent, capable of being executed and storing data, among servers in a network according to an itinerary. *See* Walsh, *Abstract*. It would have been obvious to implement Vaughan's method as mobile agent according to Walsh because both systems describe a system for managing mobile objects in a computer network.

Regarding claim 29 and 48, Vaughan teaches that the token accumulates and stores information about the load of each processor in the ring. *See generally* Vaughan at p. 431, col. 1, paragraph 3 ("each virtual rink is traversed by its own token whose purpose is to accumulate and disseminate information within the ring").

Regarding claims 30, 42, and 49, Vaughan teaches that the first processor determines a load balancing technique for the processors. *See* Vaughan at p. 431, col. 2, paragraph 5 ("a preliminary decision can be made as to the identity of the maximally loaded and minimally loaded processors").

Regarding claims 31, 33, 43, 44, 50, and 51, Vaughan teaches that the first processor may send a load balancing activation message to another processor for activating the load balancing method. *See* Vaughan at p. 432, paragraph 1 (describing "indicator" message which "contains all the information necessary to make the final load-balancing decision").

Regarding claim 32, 52 it would be obvious for the first processor to check whether the selected load balancing method is available at the destination processor.

Regarding claim 34, Vaughan teaches determining when the token has a
reaches a network management processor. *See* Vaughan at p. 431, col. 2, paragraph 4
(describing the distinguished role of the token-origin processor).

Regarding claims 35, 36, 45, 46, 53, and 54, Vaughan teaches a predetermined
order and grouping of processors. *See* Vaughan at p. 431, fig. 1.

Regarding claim 37, Vaughan teaches parallelism in the system. *See* Vaughan
at p. 431, col. 2, paragraph 3 ("parallelism is achieved in this organisation by multiple
rings which function concurrently").

Regarding claim 38, it would be obvious to use different sequences.

Regarding claim 39, Vaughan describes a multi-tiered architecture where each
sub-ring comprises a node of larger ring. *See* Vaughan at p. 431, fig. 1; Vaughan at p.
431, col. 2, paragraph 2 (describing the multi-tiered architecture).

Conclusion

10.   Please see the included *Notice of References Cited* for additional prior art
considered pertinent to applicant's disclosure but not explicitly relied upon in this action.

11.   The examiner requests, in response to this Office action, support be shown for
language added to any original claims on amendment and any new claims. That is,
indicate support for newly added claim language by specifically pointing to page(s) and
line no(s) in the specification and/or drawing figure(s). This will assist the examiner in
prosecuting the application.

12.   When responding to this office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

13.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willow Noonan whose telephone number is (571) 270-1322. The examiner can normally be reached on Monday through Friday, 7:30 AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JEFFREY PWU
SUPERVISORY PATENT EXAMINER